

IN THE CLAIMS:

1 - 3. (Cancelled)

14. (Previously presented) A method for controlling flooding in a bridged network having a bridge connected to a plurality of networks, the method comprising:
processing a packet having a destination MAC address to determine whether a mapping between the destination MAC address and a port exists;
if no mapping between the destination MAC address and port exists, then until a reply is received from a port associated with the destination MAC address, iteratively:
performing broadcast flooding of packets for a first predetermined time period; and
ceasing broadcast flooding of packets for a second predetermined time period.

15. (Previously presented) The method of claim 14, wherein said first predetermined time period and said second predetermined time period is set by a network administrator.

Docket No.: CISCO-1787

16. (Previously presented) The method of claim 14, further comprising, prior to said performing broadcast flooding of packets, consulting a filter table to determine said first predetermined time period.

17. (Previously presented) The method of claim 14, further comprising setting a flag to indicate a quiet period in which no broadcast flooding is to be performed after said first predetermined time period passes.

18. (Previously presented) The method of claim 14, wherein, an entry is made in a filter table if no mapping between the destination MAC address and port exists, then until a reply is received from a port associated with the destination MAC address.

19. (Previously presented) The method of claim 18, wherein the entry is removed from the filter table after a port associated with the destination MAC address replies to the broadcast flooding of packets.

20. (Previously presented) The method of claim 14, wherein an entry is made in the filter table indicating a number of packets that are directed at the destination MAC address.

21. (Previously presented) The method of claim 20, wherein the entry indicating the number of packets directed at a destination address is used to determine

which entry to delete from the filter table if the filter table becomes overpopulated with entries.

22. (Previously presented) A computer program product containing instructions which, when executed by a computer, controls flooding in a bridged network having a bridge connected to a plurality of networks, by:

processing a packet having a destination MAC address to determine whether a mapping between the destination MAC address and a port exists;

if no mapping between the destination MAC address and port exists, then until a reply is received from a port associated with the destination MAC address, iteratively:

performing broadcast flooding of packets for a first predetermined time period; and

ceasing broadcast flooding of packets for a second predetermined time period.

23. (Previously presented) The computer program product of claim 22, wherein said first predetermined time period and said second predetermined time period is set by a network administrator.

24. (Previously presented) The computer program product of claim 22, further comprising instructions which, when executed by a computer, prior to said

Docket No.: CISCO-1787

performing broadcast flooding of packets, consult a filter table to determine said first predetermined time period.

25. (Previously presented) The computer program product of claim 22, further comprising instructions which, when executed by a computer, set a flag to indicate a quiet period in which no broadcast flooding is to be performed after said first predetermined time period passes.

26. (Previously presented) The computer program product of claim 22, further comprising instructions which, when executed by a computer, insert an entry in a filter table if no mapping between the destination MAC address and port exists.

27. (Previously presented) The computer program product of claim 26, further comprising instructions which, when executed by a computer, remove the entry from the filter table after a port associated with the destination MAC address replies to the broadcast flooding of packets.

28. (Previously presented) The computer program product of claim 22, further comprising instructions which, when executed by a computer, make an entry in the filter table indicating a number of packets that are directed at the destination MAC address.

29. (Previously presented) The method of claim 28, further comprising instructions which, when executed by a computer, examine the entry indicating the number of packets directed at a destination address to determine which entry to delete from the filter table if the filter table becomes overpopulated with entries.

30. (Previously presented) A system for controlling flooding in a bridged network having a bridge connected to a plurality of networks, the system comprising:

means for processing a packet having a destination MAC address to determine whether a mapping between the destination MAC address and a port exists;

means for determining if no mapping between the destination MAC address and port exists, and, until a reply is received from a port associated with the destination MAC address, iteratively:

performing broadcast flooding of packets for a first predetermined time period; and

ceasing broadcast flooding of packets for a second predetermined time period.